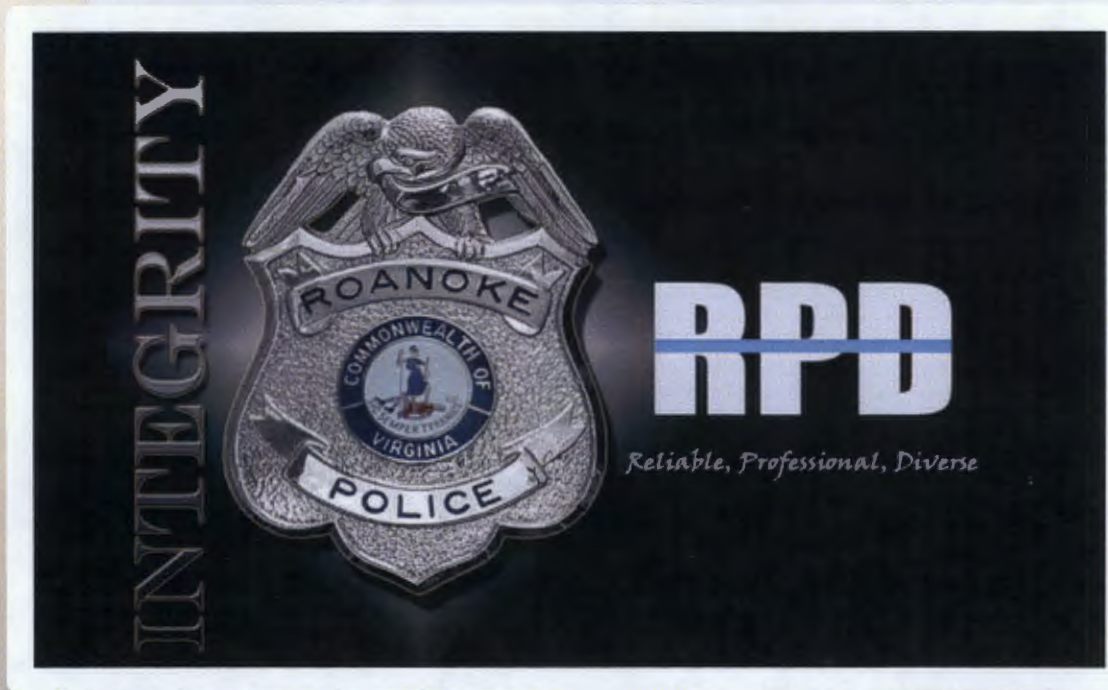


# E-Summons Workflow Study & Implementation



**Team 8:** Feng Jiao, Cassie Monteverde, Colin Wall, Senxuan Wang

**Client:** The City of Roanoke, Virginia

**Contact:** Lt. Jeffrey Newman

**Advisor:** Dr. Joel Nachlas



The Roanoke Police Department employs 248 officers and serves approximately 98,000 residents.



- 23,000 summons issued annually



RPD currently uses a traffic summons process that requires handwritten completion of citations, and manual electronic data entry by both RPD and city court.

- Redundant Steps
- Open to inconsistencies & error





Implementation of an electronic ticketing system could save the RPD 3,000 work hours for redistribution to other tasks, a value of \$51-82K per year

	Base Pay	Top Pay
Police Officers	\$32,461.21	\$51,937.93
RPD Clerks Office	\$18,923.27	\$30,277.72
<hr/>		
<b>Annual Savings Range:</b>	<b>\$51,384.47</b>	<b>\$82,215.65</b>

- Elimination of citation data entry
- Decreased error rates
- Increased employee and system efficiency



To achieve the desired E-Summons system, a Request for Information document (RFI) was formulated to solicit product information from potential vendors.

The RFI includes:

- Current state of system
- Criteria for the desired system
- Backend requirements
- Installation
- Maintenance

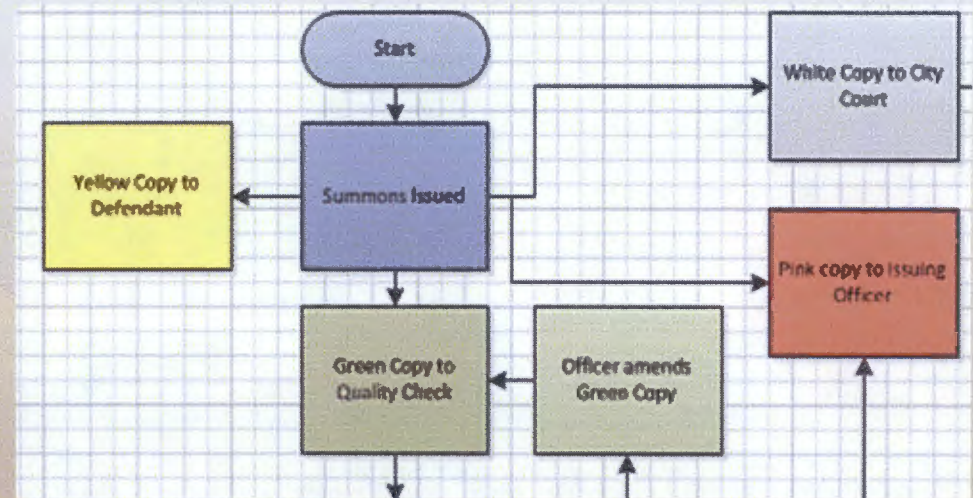
Scheduled to be published Summer 2015



# To complete the RFI, benchmarking and a current state analysis were performed.

## Current State Analysis:

- Process Map
- Stakeholder concerns



## Benchmarking Report:

- Salem PD case study
- Market and vendor research



# Current Summon System



- Manually enter drivers license & registration information
- Manually complete summons (4 carbon copies)
- Time consuming and high error rate



# E-Summons System



- Scan drivers license & registration information
- Summons printed in cruiser (2 copies)
- Increased efficiency and decreased error rate



Offender Copy



Court Copy



Digital Information  
Sent to Database



RPD was provided with a Vendor Evaluation Excel spreadsheet to rate and evaluate vendor proposals.

Weight per Category (%)	VENDOR REQUIREMENTS	SCORE (Out of 10)
10.0%	Employee Training (Time, cost, effort needed)	
5.0%	Facility and technology (Usability, stability, speed)	
20.0%	Price/cost (purchase cost, maintenance cost)	
5.0%	Product quality (Overall Quality of Parts, Products, Materials, Software adaptation to current RMS)	
5.0%	Responsiveness to customer needs	
10.0%	Competitiveness of Price	
10.0%	Quality of Service Provided	
5.0%	Competitiveness of Terms and Conditions	
5.0%	Credit Rating	
5.0%	Overall Financial Condition	
5.0%	Reputation of Company	
5.0%	Quality of Design Compared to Specifications	
5.0%	Technical Support Staff's Level of Expertise	
5.0%	Warranty	

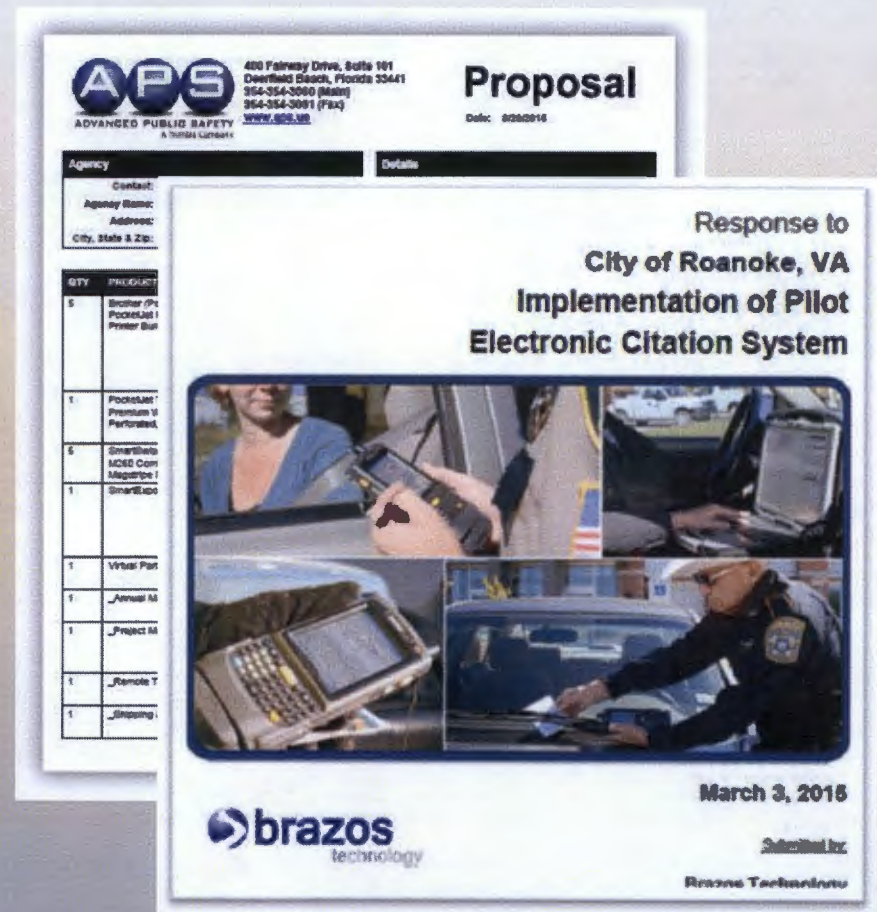
- Based upon valued criteria
- Criteria is weighted



# Planned implementation of the new electronic summons system will kick-off with a 6 month Pilot Launch Program.

5 police cruisers outfitted

- Citation software
- Tablets
- Printers
- Scanning device





A four stage roll-out plan will complete implementation of the new electronic summons system and at completion will save the RPD approx \$51-82,000 per year or 3,000 work hours.



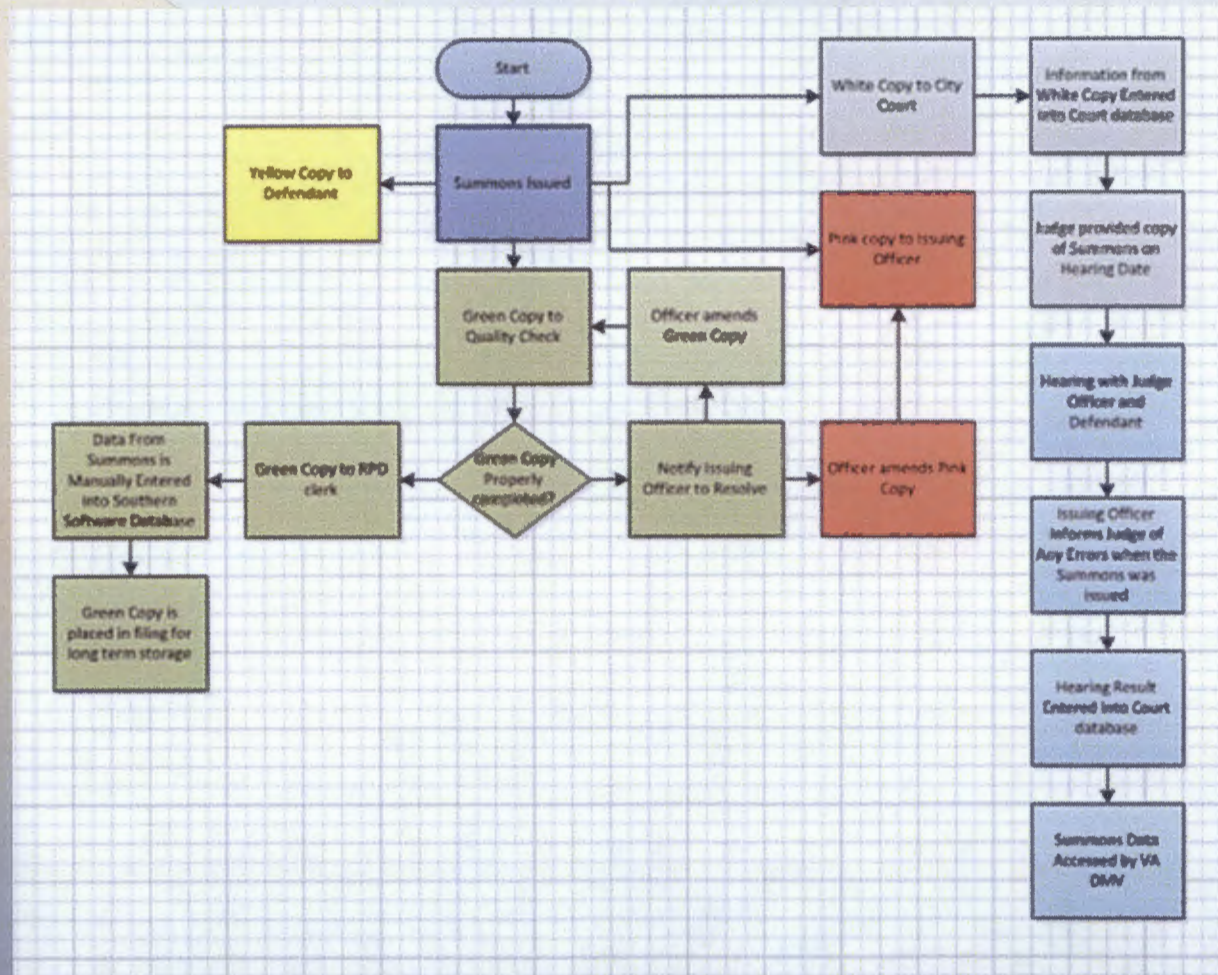
70 Police Cruisers

- Chevy Impala, Dodge Charger & Ford Interceptor



# Appendix

## RPD Summons Current State Process Map





# Appendix

## Annual Savings Range Summary

<b>Approx. Summons Issued Per Year:</b>		<b>23000</b>					
	<b>TIME ELIMINATED PER SUMMONS (min)</b>	<b>TIME ELIMINATED ANNUALLY (hr)</b>	<b>TIME ELIMINATED WEEKLY (hr)</b>	<b>BASE PAY (hr)</b>	<b>TOP PAY (hr)</b>	<b>Time Saved BASE PAY (wk)</b>	<b>Time Saved TOP PAY (wk)</b>
<b>RPD Clerks Office</b>	5	1916.67	36.86	\$16.94	\$27.10	\$624.25	\$998.81
<b>Police Officers</b>	2	766.67	14.74	\$24.68	\$39.49	\$363.91	\$582.26
				<b>Police officers</b>		<b>\$32,461.21</b>	<b>\$51,937.93</b>
				<b>RPD Clerks office</b>		<b>\$18,923.27</b>	<b>\$30,277.72</b>
				<b>Annually:</b>		<b>\$51,384.47</b>	<b>\$82,215.65</b>

The stated data points are from March 2015